## REMARKS

Entry of the foregoing amendment and reconsideration of this application are respectfully requested. Claims 1 and 7 have been amended, claims 6, 14 and 15 have been cancelled and claims 1-5 and 7-10 are now pending in the application.

Regarding the rejection under 35 USC §112, second paragraph, claims 6, 14 and 15 have been cancelled. Claim 7 is now dependent on claim 1 which has been amended to recite a method of producing a photocatalyst comprising a carrier carrying titania and platinum. It is submitted that all claims are in compliance with 35 USC §112.

Claims 1-10 have been rejected under 35 USC §103(a) as being unpatentable over Hibi '667 in view of Deeba et al '825.

The single independent method claim 1 has now been amended to recite:

preparing a metal carrying step of causing the carrier carrying the titania to carry a compound of platinum;

reducing the compound of platinum carried on the titania by hydrogen in a heating atmosphere at a first treatment temperature, the compound of platinum carried by the carrier in the metal carrying step; and

heating, to a degree not transformed into oxide in a heating atmosphere containing oxygen at a second treatment temperature, the platinum obtained by hydrogen reduction in the reduction step to thereby make platinum release from an extremely strong reduction state and enhance activity of the platinum.

Support for these recitations can be found in the original specification at page 9, lines 5-7 and lines 20-23.

It should be evident that the oxidation process is not a process producing an oxide of platinum, but a heating process heating platinum in a heating atmosphere containing oxygen, e.g. oxygen gas.

In column 3, lines 45-65 of Hibi, a method of producing ruthenium oxide catalyst and heating ruthenium chloride carried on carrier in a hydrogen gas flow is described. Also, in this portion of the Hibi patent "there was a problem that a supported ruthenium

oxide catalyst prepared by oxidizing a catalyst reduced by hydrogen has low activity" is described.

And in view of column 6, lines 4-6, "a supported ruthenium oxide catalyst containing ruthenium oxide only at an outer surface layer, not less than 80% of the outer surface of said catalyst" to add to the process described in column 3, lines 45-65 would be recognized as a process preparing ruthenium oxide by reducing ruthenium chloride carried on the carrier in a hydrogen gas and oxidizing ruthenium reduced by hydrogen.

On the other hand, in the present invention, a compound of platinum carried by a carrier is reduced by hydrogen to thereby obtain platinum, and then, this platinum is heated and oxidized in the atmosphere containing oxygen, for example, air, oxygen, and ozone atmosphere. In this heating process, heating is carried out to a degree that platinum is not transformed into the oxide. That is, the heating process is stopped when the extremely strong reduction state of platinum by which hydrogen reduction was carried out is cancelled. Accordingly, it is not the oxide of platinum, but platinum itself obtained in this process.

When the compound of platinum is reduced by hydrogen in a heating atmosphere, the compound changes to platinum and it is thought that much hydrogen is occluded into platinum at this time. It is presumed hydrogen is released from platinum by heating thereof in the atmosphere containing oxygen after that, and this releasing of hydrogen cases that the crystal of platinum generated at the time of hydrogen reduction becomes very minute particles of the crystal. For this reason, it is thought that the surface area of a catalyst is very large, and very high catalyst activity is obtained so a result of testing in the specification shows.

Therefore, structures different between the catalyst of this invention and the catalyst indicated by Hibi. Further, Hibi does not indicate the motivation to generate the platinum-titania catalyst provided with platinum which has high catalyst activity by reducing the compound of platinum and canceling the extremely strong reduction state as

this invention shows. Consequently, this invention cannot be made easily by the person skilled in the art based on the cited documents.

Deeba fails to rectify the deficiencies of Hibi.

Based on the foregoing, it is submitted that the pending claims are patentably distinct over Hibi and Deeba et al

Accordingly, the Examiner is requested to withdraw the rejections, and pass this application to issue with claims 1-5 and 7-10 being deemed allowable.

Respectfully submitted,

ANDRUS, SCEALES, STARKE & SAWALL, LLP

William L. Falk
Reg. No. 27,709

100 East Wisconsin Avenue, Suite 1100
Milwaukee, Wisconsin 53202
Phone: (414) 271-7590
Facsimile: (414) 271-5770